IN THE CLAIMS

The status of the claims is as follows. The claims have not been amended.

1. (Previously Presented) A radio frequency (RF) transceiver comprising:

a radio frequency (RF) modem section comprising:

receive path circuitry capable of receiving and down-converting an incoming RF signal to thereby produce an incoming baseband signal; and

transmit path circuitry capable of receiving and up-converting an outgoing baseband signal to thereby produce an outgoing RF signal;

a baseband section comprising baseband circuitry capable of receiving and processing said incoming baseband signal and capable of generating said outgoing baseband signal; and

a power-saving apparatus capable of determining that said baseband section is idle and, in response to said determination, placing the RF transceiver in a first of a plurality of low-power modes by reducing a power supply voltage providing power to said baseband section;

wherein the power-saving apparatus comprises a timer, and wherein only the timer is capable of receiving power when the RF transceiver is in another of the low-power modes.

2. (Previously Presented) The RF transceiver as set forth in Claim 1 wherein said power-saving apparatus is further capable of reducing a power supply voltage providing power to said receive path circuitry in a second of the low-power modes.

3. (Previously Presented) The RF transceiver as set forth in Claim 2 wherein said power-saving apparatus further comprises a switch operable to switch said power supply voltage on and off to said receive path circuitry.

4. (Original) The RF transceiver as set forth in Claim 3 wherein said power-saving apparatus is further capable of monitoring said incoming baseband signal during a time period when said power supply voltage is switched on to said receive path circuitry and determining if said incoming baseband signal is directed to said RF transceiver.

5. (Original) The RF transceiver as set forth in Claim 4 wherein said power-saving apparatus, in response to a determination that said incoming baseband signal is directed to said RF transceiver, increases said power supply voltage providing power to said baseband section.

6. (Original) The RF transceiver as set forth in Claim 4 wherein said power-saving apparatus, in response to a determination that said incoming baseband signal is directed to said RF transceiver, increases said power supply voltage providing power to said receive path circuitry.

7. (Previously Presented) The RF transceiver as set forth in Claim 6 wherein said power-saving apparatus is further capable of reducing a power supply voltage providing power to said transmit path circuitry in a third of the low-power modes; and

wherein only the timer is capable of receiving power when the RF transceiver is in the third low-power mode.

8. (Original) The RF transceiver as set forth in Claim 7 wherein said power-saving apparatus, in response to a determination that said incoming baseband signal is directed to said RF transceiver, increases said power supply voltage providing power to said transmit path circuitry.

9. (Previously Presented) The RF transceiver as set forth in Claim 1 wherein said power-saving apparatus is further capable of reducing a power supply voltage providing power to said transmit path circuitry in a second of the low-power modes.

10. (Original) The RF transceiver as set forth in Claim 9 wherein said power-saving apparatus is further capable of monitoring said incoming baseband signal and determining if said incoming baseband signal is directed to said RF transceiver.

11. (Original) The RF transceiver as set forth in Claim 10 wherein said power-saving apparatus, in response to a determination that said incoming baseband signal is directed to said RF transceiver, increases said power supply voltage providing power to said transmit path circuitry.

12. (Original) The RF transceiver as set forth in Claim 11 wherein said power-saving apparatus, in response to said determination that said incoming baseband signal is directed to said RF transceiver, increases said power supply voltage providing power to said baseband section.

13. (Previously Presented) A method of reducing power consumption in a radio frequency transceiver comprising: 1) receive path circuitry for receiving and down-converting an incoming RF signal to produce an incoming baseband signal; 2) transmit path circuitry for receiving and up-converting an outgoing baseband signal to produce an outgoing RF signal; and 3) a baseband section comprising baseband circuitry for receiving and processing the incoming baseband signal and generating the outgoing baseband signal, the method comprising the steps of:

determining that the baseband section is idle;

in response to the determination that the baseband section is idle, placing the RF transceiver in a first of a plurality of low-power modes by reducing a power supply voltage providing power to the baseband section; and

in another of the low power modes, supplying power only to a timer in the radio frequency transceiver, wherein the timer is capable of selectively increasing the power provided to at least the receive path circuitry.

14. (Previously Presented) The method as set as set forth in Claim 13 further comprising the step of reducing a power supply voltage providing power to the receive path circuitry in a second of the low-power modes.

15. (Original) The method as set forth in Claim 14 further comprising the step of switching the power supply voltage on and off to the receive path circuitry.

16. (Original) The method as set forth in Claim 15 further comprising the steps of:

monitoring the incoming baseband signal during a time period when the power supply voltage is switched on to the receive path circuitry; and

determining if the incoming baseband signal is directed to the RF transceiver.

17. (Original) The method as set forth in Claim 16 further comprising the step, in response to a determination that the incoming baseband signal is directed to the RF transceiver, of increasing the power supply voltage providing power to the baseband section.

18. (Original) The method as set forth in Claim 16 further comprising the step, in response to a determination that the incoming baseband signal is directed to the RF transceiver, of increasing the power supply voltage providing power to the receive path circuitry.

19. (Previously Presented) The method as set forth in Claim 18 further comprising the step of reducing a power supply voltage providing power to the transmit path circuitry in a third of the low-power modes; and

wherein only the timer is capable of receiving power when the RF transceiver is in the third low-power mode.

20. (Original) The method as set forth in Claim 19 further comprising the steps, in response to a determination that the incoming baseband signal is directed to the RF transceiver, of increasing the power supply voltage providing power to the transmit path circuitry.

21. (Previously Presented) The method as set forth in Claim 13 further comprising the step of reducing a power supply voltage providing power to the transmit path circuitry in a second of the low-power modes.

22. (Original) The method as set forth in Claim 21 further comprising the steps of monitoring the incoming baseband signal and determining if the incoming baseband signal is directed to the RF transceiver.

23. (Original) The method as set forth in Claim 22 further comprising the step, in response to a determination that the incoming baseband signal is directed to the RF transceiver, of increasing the power supply voltage providing power to the transmit path circuitry.

24. (Original) The method as set forth in Claim 23 further comprising the step, in response to the determination that the incoming baseband signal is directed to the RF transceiver, of increasing the power supply voltage providing power to the baseband section.

25. (Previously Presented) A radio frequency (RF) transceiver, comprising:

receive path circuitry capable of receiving and down-converting an incoming RF signal to thereby produce an incoming baseband signal;

transmit path circuitry capable of receiving and up-converting an outgoing baseband signal to thereby produce an outgoing RF signal;

baseband circuitry capable of receiving and processing the incoming baseband signal and capable of generating the outgoing baseband signal; and

a power-saving apparatus capable of:

reducing power provided to the baseband circuitry in a first low-power mode;

reducing power provided to the baseband circuitry and to one of the transmit path circuitry and the receive path circuitry in a second low-power mode;

reducing power provided to the baseband circuitry, the transmit path circuitry, and the receive path circuitry in a third low-power mode; and

wherein the power-saving apparatus comprises a timer, and wherein only the timer is capable of receiving power when the RF transceiver is in the third low-power mode.

26. (Previously Presented) The RF transceiver as set forth in Claim 25, wherein the power-saving apparatus is further capable of periodically increasing the power provided to at least the receive path circuitry using the timer when in the third low-power mode.